

March 2, 2005

**TO:** James E. Sulton, Jr., Ph.D.  
Executive Director

**FROM:** Gary Benson, Director for Fiscal Policy

**SUBJECT: Higher Education Policy Alternatives Evaluation**

The 2004 supplemental operating budget provided \$100,000 to the Higher Education Coordinating Board to evaluate several policy alternatives. These alternatives have to do with the inter-relations among higher education participation, graduation, state support, tuition, capital funding, and financial aid. The nature of these alternatives is specified in the budget proviso. The format of evaluation is also identified in the proviso – operating costs for the next six years, enrollments by sector, high-demand and method of delivery, capital facility needs, and financial aid costs.

#### **A. Deliverables**

A report on six policy alternatives was due by December 15, 2004. The report is still being prepared.

In evaluating the policy alternatives, the HECB was to construct a simulation model that will provide the impacts and costs. The purpose of the model is to assist the legislature and governor in evaluating various investment alternatives. A “beta” version of the model was operational by December 15, 2004. Work continues on refining the model.

The HECB was to consult with the Office of Financial Management, legislative staff, and the public and private higher education institutions to refine the policy alternatives and delineate the content of the model. The public institutions, the Office of Financial Management, and the Legislative Evaluation and Accountability Program Committee were to cooperate with the HECB by providing information to construct the model.

#### **B. Evaluation Content**

The evaluation is to incorporate, where appropriate, the analysis and recommendations that will be contained in the final strategic master plan for higher education and the report from the National Collaborative for Postsecondary Education.

For each policy alternative, the following are to be identified:

1. Implementation costs for the next three biennia (through 2009-11) for both the state general fund and tuition;
2. Enrollments by specific institution, location, and type of program;
3. Allocation of high-demand and general enrollments;
4. Methods of delivery;
5. Capital facility needs; and
6. Financial aid funding needs (and implications for students on whether these needs are met).

### C. Policy Alternatives

There were six policy alternatives specified in the budget proviso:

1. **Enrollments:** current participation and distribution  
**Funding:** state general fund and total funding increase at the rate of the CPI  
**Capital funding:** no capital funding for increased capacity  
**Financial aid:** state need grant policies are maintained
2. **Enrollments:** (a) graduation rates and participation rates are in the top quarter – overall and within each sector (CTC, comprehensives and research); (b) distributed to sectors and locations based on population demand (specifically Puget Sound and southwest Washington)  
**Funding:** state support increases to pay for new enrollments at peer averages and total funding increases to peer averages  
**Capital funding:** increases to meet growth  
**Financial aid:** current state need grant practices are maintained
3. **Enrollments:** (a) graduation rates and participation rates are in the top quarter of all states – overall and within each sector; (b) distributed to sectors and locations based upon population demand (including evaluation of demand in Puget Sound and southwest Washington)  
**Funding:** total funding increases to peer averages  
**Capital funding:** increases to meet growth  
**Financial aid:** state general fund increases to pay for estimated increases in financial need; current state need grant practices are maintained, plus state funding to meet increased need
4. **Funding:** tuition levels necessary to achieve total funding per student to average level in other states
5. **Financial aid:** funding increases so that half of all students are able to graduate debt free (based on information provided to the institutions of higher education); and for those who have loan repayment obligations, the obligations do not exceed 10 percent of the graduates' average annual post-graduation income
6. **Funding:** replace the state general fund support for public institutions with vouchers, which students may use at any accredited higher education institution

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# ***HECB Higher Education Simulation Model***

***Higher Education Coordinating Board  
April 5, 2005***

## ***2004 supplemental operating budget***

- **Evaluate several higher education policy alternatives**
- **Prepare a report on these alternatives**
- **Construct a simulation model to provide the impacts and costs of various policy alternatives**

## *Six policy alternatives described in supplemental budget*

- 1. Maintain current trends**
- 2. High participation and peer level funding for new enrollments**
- 3. High participation and peer level funding for all enrollments**
- 4. Increase tuition to attain national average funding**

## ***Six policy alternatives*** *(continued)*

- 5. Increase financial aid so students graduate with less debt**
- 6. Replace state support to public institutions with vouchers**

***The simulation model was designed to bring together all the pieces***

- **Enrollment (demand, distribution, and capacity)**
- **Operating budget needs**
- **Capital budget needs**
- **Tuition**
- **Financial aid**
- **Degrees**



***This presentation will provide the results of the following scenarios:***

- I. Enrollment scenarios**
- II. Funding scenarios**
- III. Degree production scenarios**

## ***I. Enrollment scenarios***

- **Current trends: maintain the current participation rate**
- **Reach the national 50<sup>th</sup> percentile in participation**
- **Reach the national 75<sup>th</sup> percentile in participation**

## ***Enrollment projections based on participation rate***

- **The participation rate is the percent of the population enrolled in higher education**
- **This rate can be specified by age, sex, race, residence (state or county)**
- **The rate from the current period is applied to population forecasts**

## *Washington ranks 22<sup>nd</sup> in total higher education participation*

| <b>Participation Rates:</b><br><b>How Washington compares to other states</b> |                        |                        |                        |
|---|------------------------|------------------------|------------------------|
|   | <i><b>Total</b></i>    | <i><b>Public</b></i>   | <i><b>Private</b></i>  |
| <b>Total</b>  | <b>22<sup>nd</sup></b> | <b>12<sup>th</sup></b> | <b>36<sup>th</sup></b> |
| Two-year  | 4 <sup>th</sup>        | 4 <sup>th</sup>        | 30 <sup>th</sup>       |
| Four-year   | 49 <sup>th</sup>       | 47 <sup>th</sup>       | 35 <sup>th</sup>       |
| Undergraduate   | 48 <sup>th</sup>       | 46 <sup>th</sup>       | 41 <sup>st</sup>       |
| Graduate  | 44 <sup>th</sup>       | 49 <sup>th</sup>       | 23 <sup>rd</sup>       |

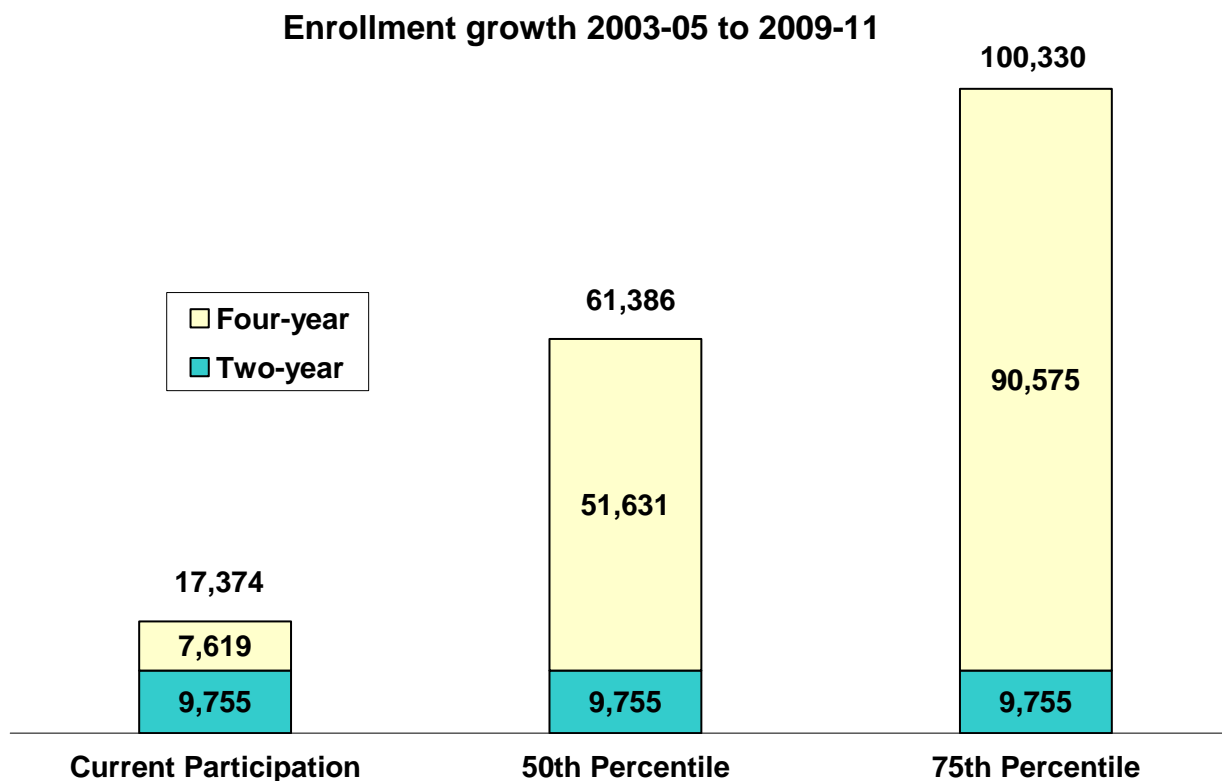
Percent of population 17 and over attending a degree-granting institution. Based on fall 2000 enrollments reported to U.S. Department of Education and 2000 Census.

## *Participation in Washington's public four-year institutions is relatively low*

| <b>Participation rates:</b><br><b>How Washington compares to states in the 50<sup>th</sup> and 75<sup>th</sup> percentiles</b> |                                     |                                  |
|--|-------------------------------------|----------------------------------|
|  | <i><b>Public Undergraduates</b></i> | <i><b>Public Grad./Prof.</b></i> |
| <b>Washington</b>  | <b>1.71%</b>                        | <b>0.37%</b>                     |
| <b>50<sup>th</sup> Percentile</b>  | <b>2.40%</b>                        | <b>0.57%</b>                     |
| <b>75<sup>th</sup> Percentile</b>  | <b>3.17%</b>                        | <b>0.70%</b>                     |

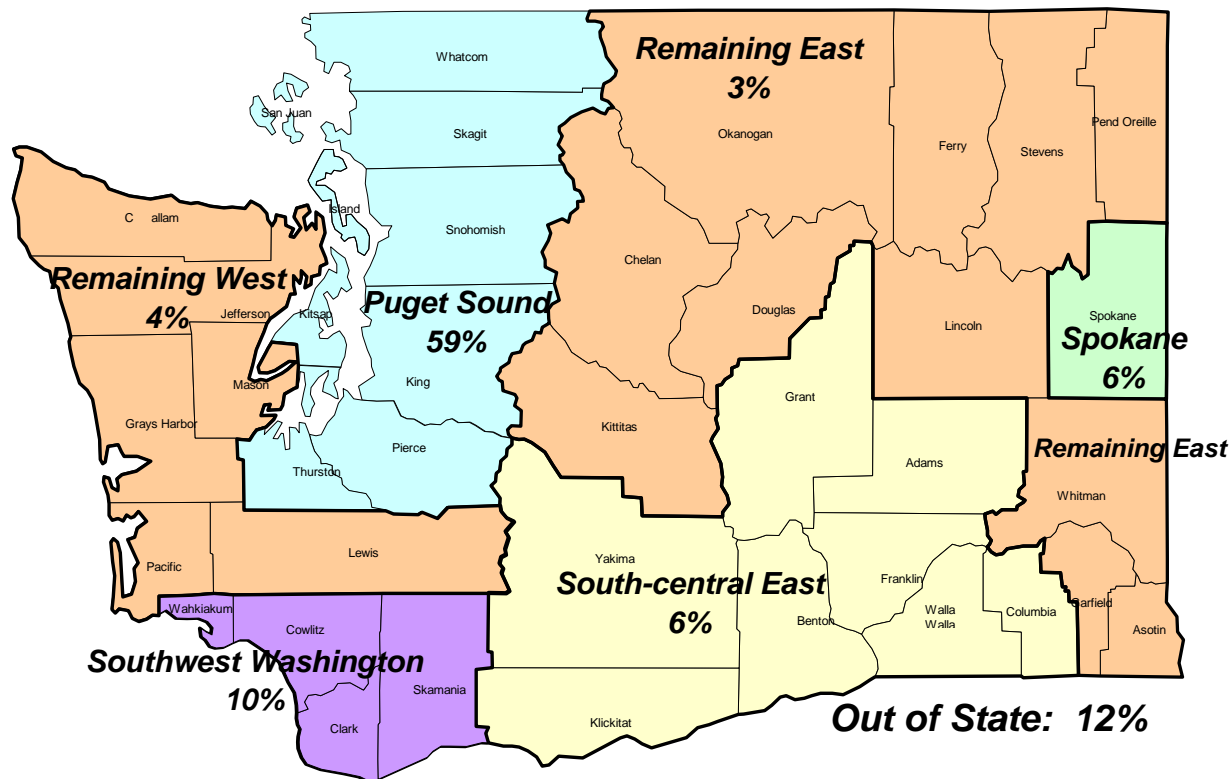
Percent of population 17 and over attending a degree-granting institution. Based on fall 2000 enrollments reported to U.S. Department of Education and 2000 Census.

## *Maintaining current participation rates will require 17,400 more enrollments*



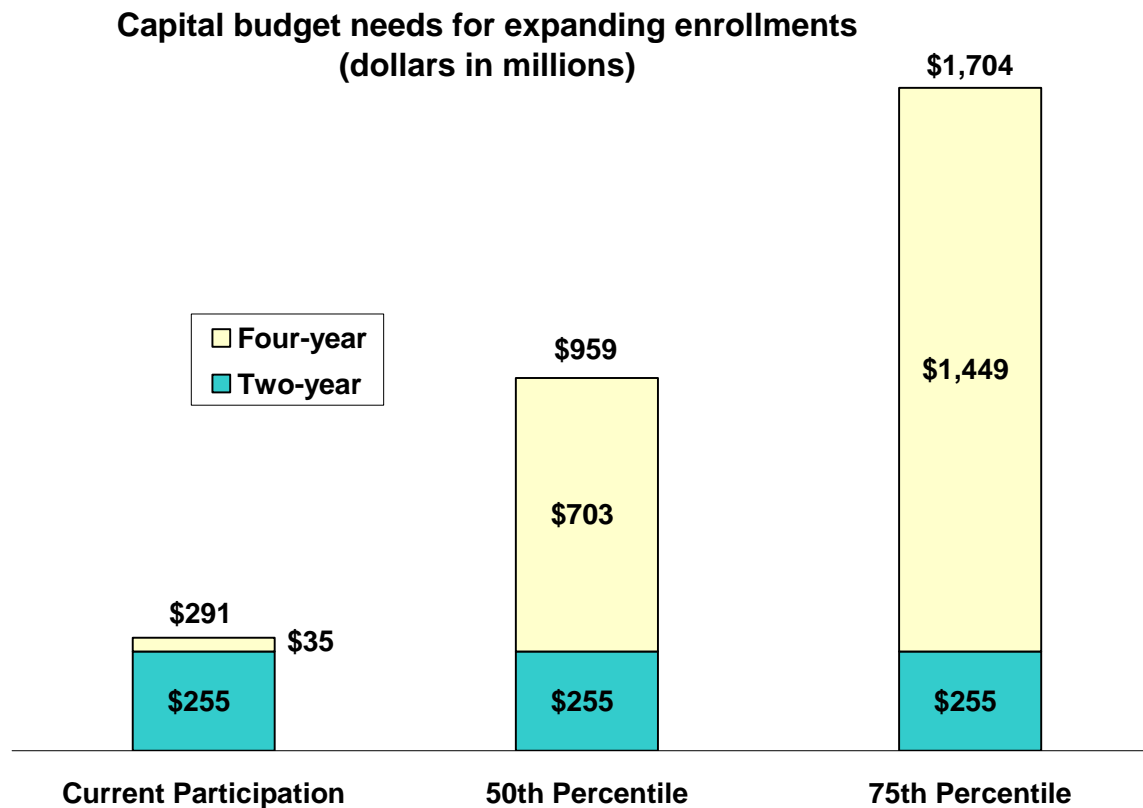
## *Nearly three-fifths of this enrollment growth will occur in the Puget Sound region*

**Shares of Enrollment Growth to Maintain Current Participation Rate  
2003-05 to 2009-11**



**Washington State Regions for Simulation Model**

## *Additional enrollments will require expanded facilities*





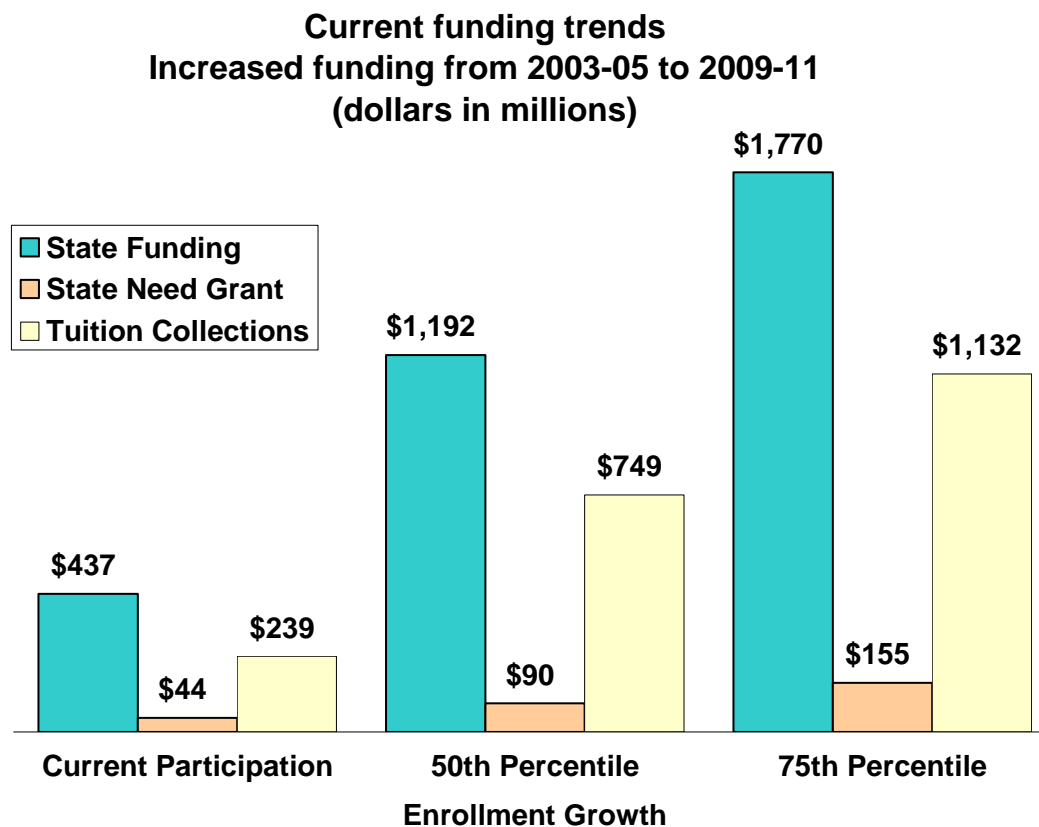
## ***II. Funding scenarios***

- A. Current trends: state-support per student and tuition rates grow with inflation**
- B. Total funding (state support + tuition collections) set at “peer” levels and then adjusted for inflation**
- C. Increase tuition so that total funding (state support + tuition collections) is at national average and then adjusted for inflation**

## ***II. Funding scenarios***

**A. Current trends: State-support per student and tuition rates grow with inflation**

# *Based on current trends, state funding, State Need Grant awards, and tuition will grow with inflation*



## ***II. Funding scenarios***

### **B. Total funding (state support + tuition collections) set at “peer” levels and then adjusted for inflation**

- Enhanced funding for enrollment growth only
- Enhanced funding for all students

## *Defining “peer” institutions*

- ***UW:*** All public research universities category 1 with medical schools
- ***WSU:*** All public land grant universities classified as research universities category 1 and 2 with veterinary schools
- ***Comprehensives:*** All public institutions classified as comprehensive universities and colleges category 1
- ***Community colleges:*** All community colleges in the western U.S.

## ***Initial assumptions by sector to achieve total “peer” funding levels***

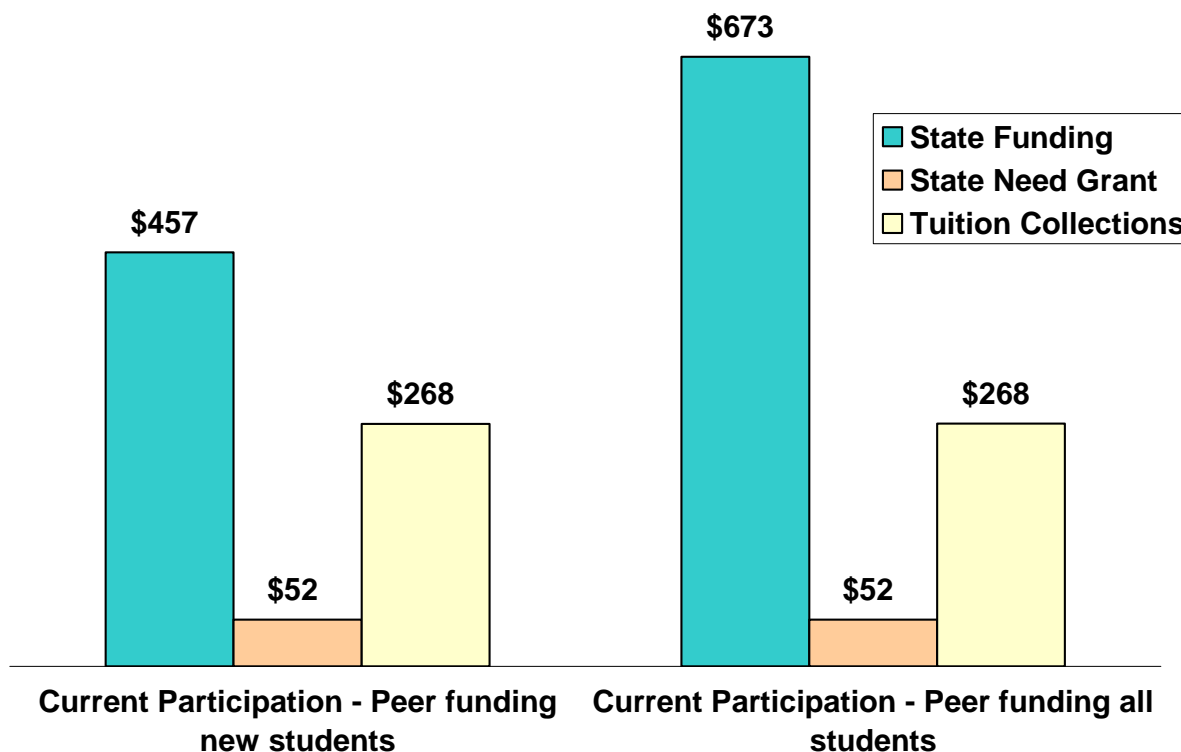
- **State support per student is less in Washington than at peer institutions**
- **Tuition collections per student are higher in Washington than at peer institutions, except at WSU**
- **Total funding per student is less in Washington than at peer institutions, except at CTCs**

## ***Initial assumptions by sector to achieve total “peer” funding levels***

- ***UW:*** State support per student increased by 21%; no change in tuition
- ***WSU:*** State support increased by 14%; tuition increased by 16%
- ***Comprehensives:*** State support per student increased by 2%; no change in tuition
- ***CTC:*** No change in state support; no change in tuition

# *Achieving “peer” funding at current participation rate will increase costs*

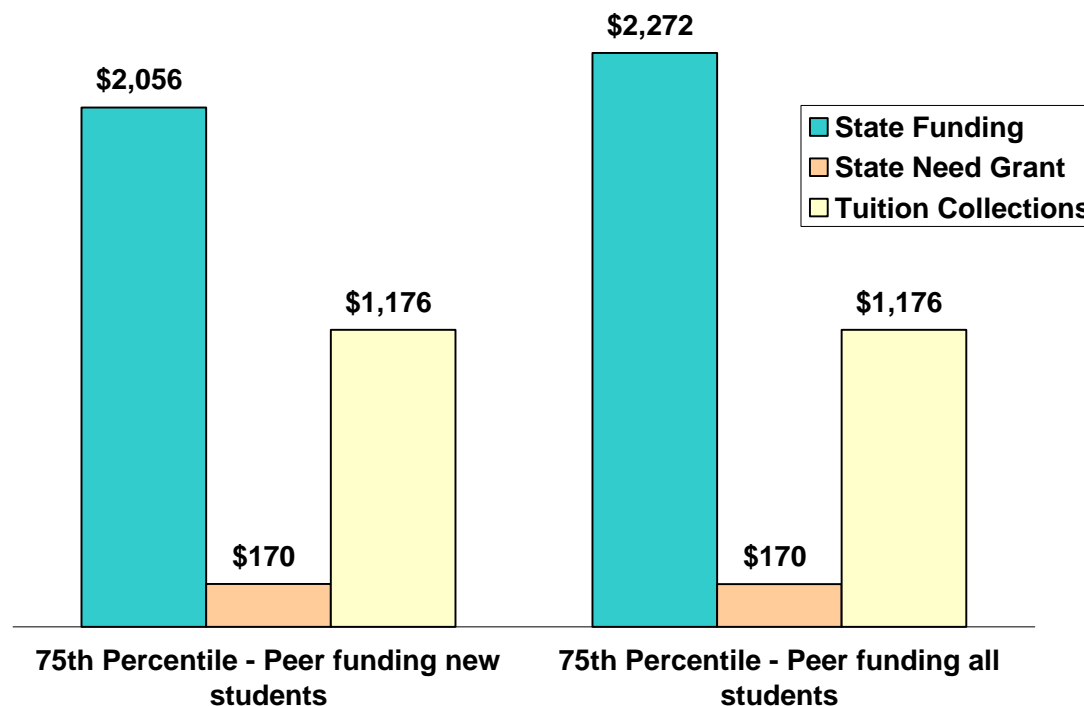
Increased costs for peer funding  
(dollars in millions)





# *Achieving “peer” funding at 75<sup>th</sup> percentile participation rate will cost even more*

Increased costs with peer funding and enrollments growing to the  
75th percentile  
(dollars in millions)



### ***III. Funding scenarios***

**C. Increase tuition so total funding  
(state support + tuition collections)  
is at national average and then  
adjusted for inflation**

## *Assumptions depend on several factors*

- All sectors are combined
- From institutional perspective, state financial aid is revenue from student
- From state perspective, state financial aid is state expense
- Enrollments grow at the current participation rate
- After initial tuition adjustment, all funding grows with inflation

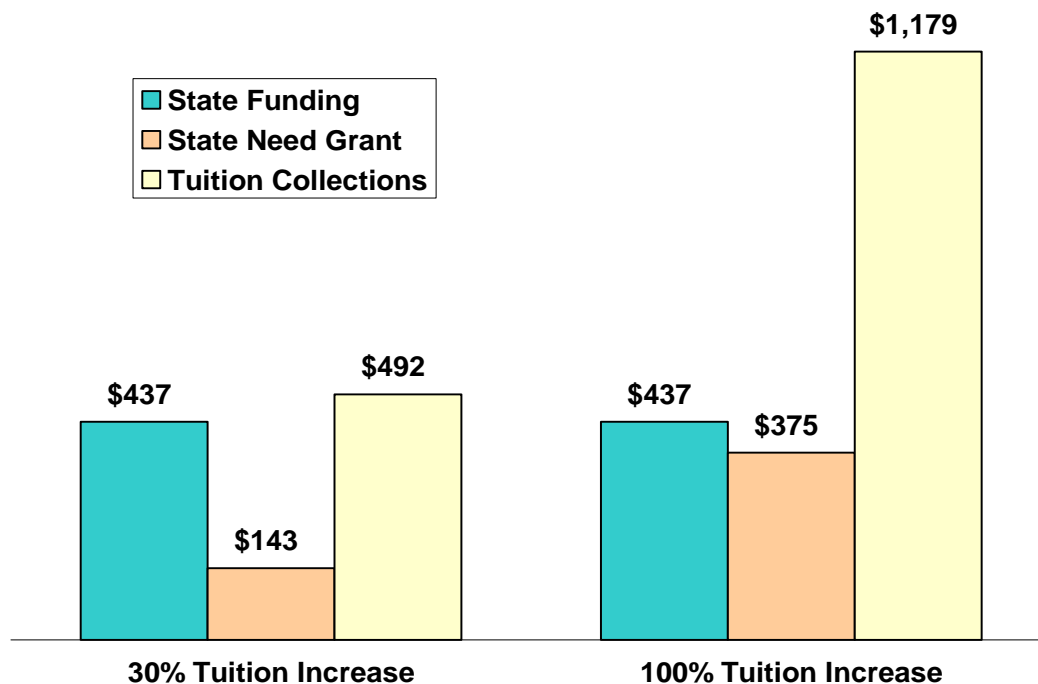
## ***These perspectives result in different assumptions***

**For total revenue per student to equal the national average:**

- **Tuition, including financial aid, would need to rise 30% (institutional perspective)**
- **Tuition, excluding financial aid, would need to rise 100% (state perspective)**

## ***Raising tuition by 30% and 100% between 2003-05 and 2009-11 would increase higher education funding***

Increasing tuition  
(dollars in millions)

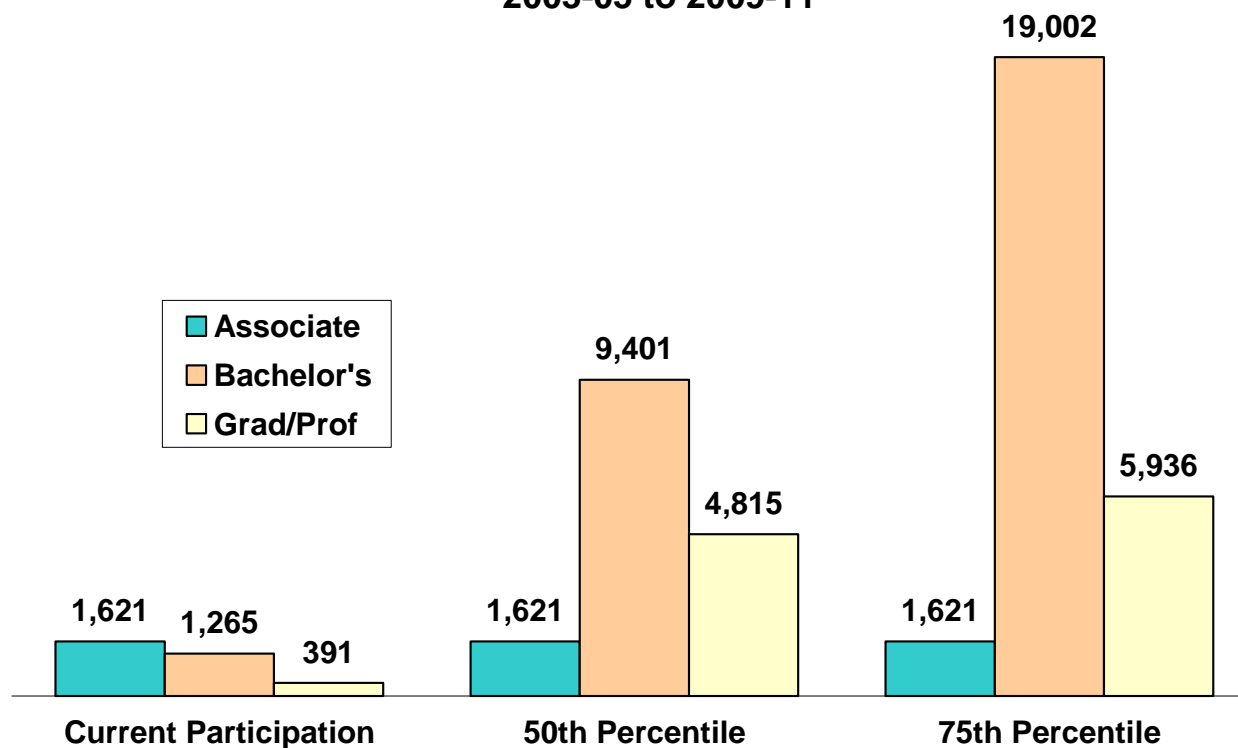


### ***III. Degree production scenarios***

- **Based on previous enrollment scenarios**
- **Increasing bachelor's degree production**

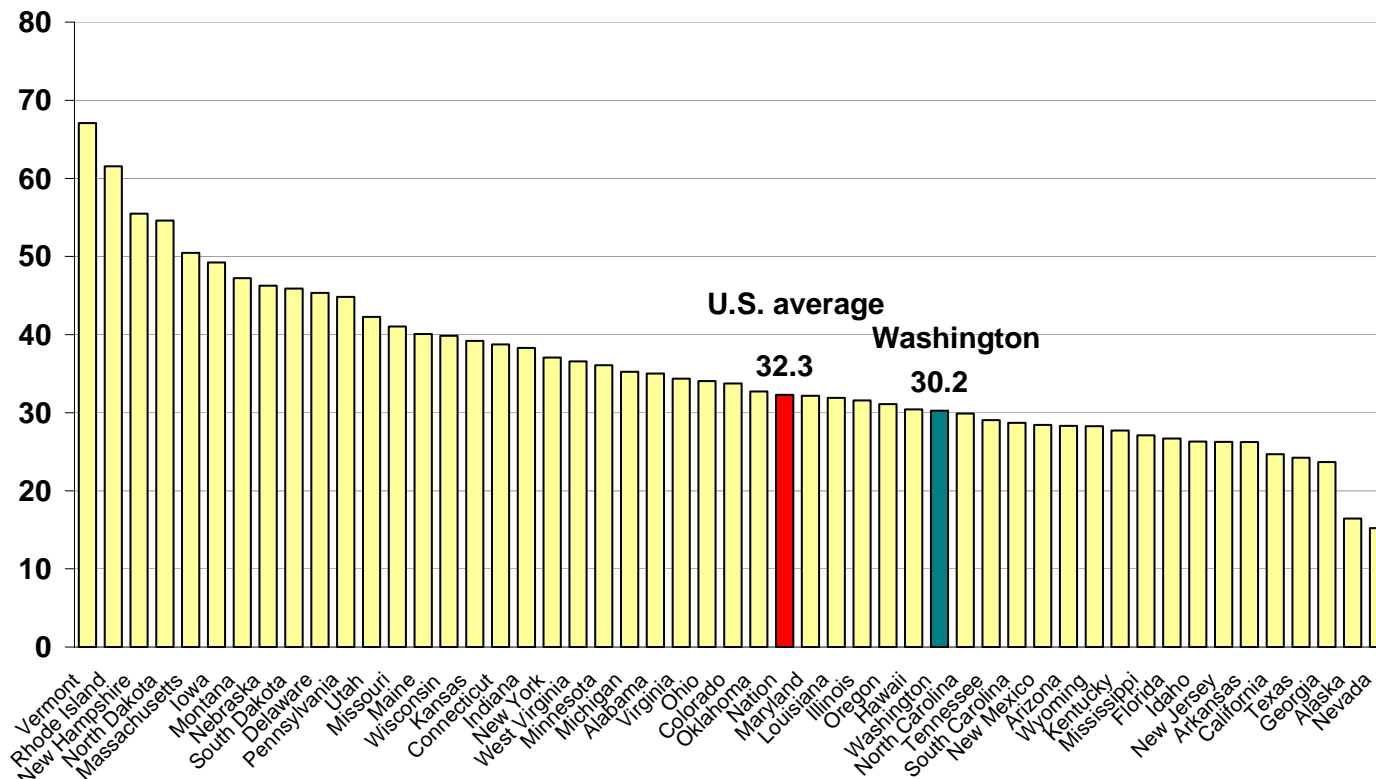
# *Significantly more degrees will be awarded at higher enrollment levels*

Projected change in annual degrees at differing enrollment levels  
2003-05 to 2009-11



# Washington ranked 33<sup>rd</sup> among the states in the number of bachelor's degrees earned

Bachelor's degrees earned per 1,000 residents  
ages 20-29 years old, 2000



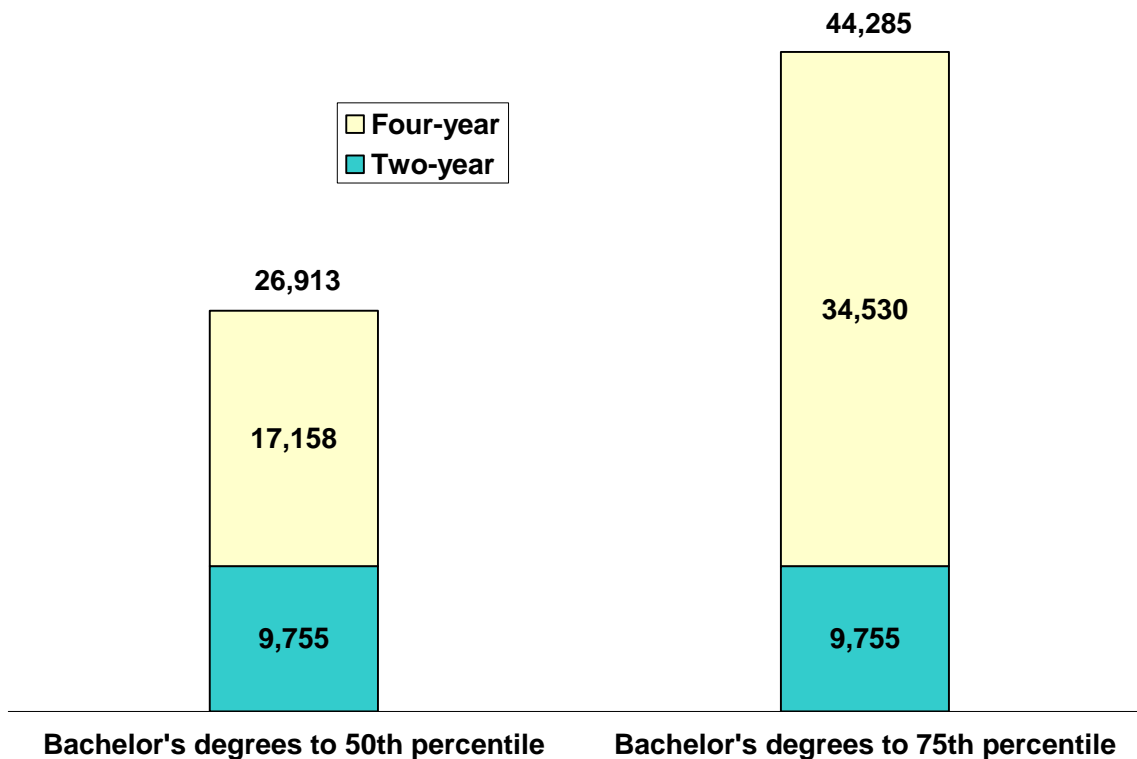


## ***The rate of bachelor's degree production compared to other states***

- **Washington produced 30.2 bachelor's degrees per 1,000 residents ages 20-29**
- **The 50<sup>th</sup> percentile (median) state produced 33.8 degrees per 1,000 residents ages 20-29**
- **The 75<sup>th</sup> percentile state produced 40.5 degrees per 1,000 residents ages 20-29**

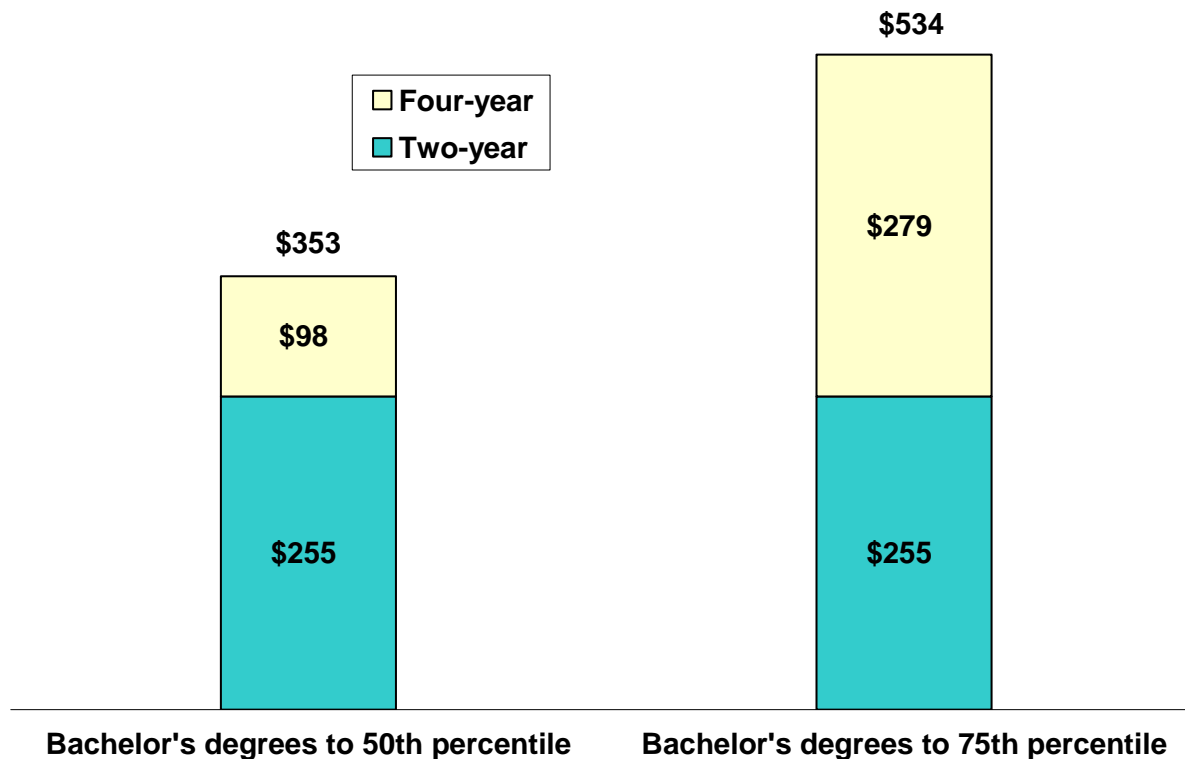
# *Enrollment in the public four-year institutions would need to increase by 17,000 students to reach the 50<sup>th</sup> percentile*

Enrollment growth needed to increase bachelor's degrees

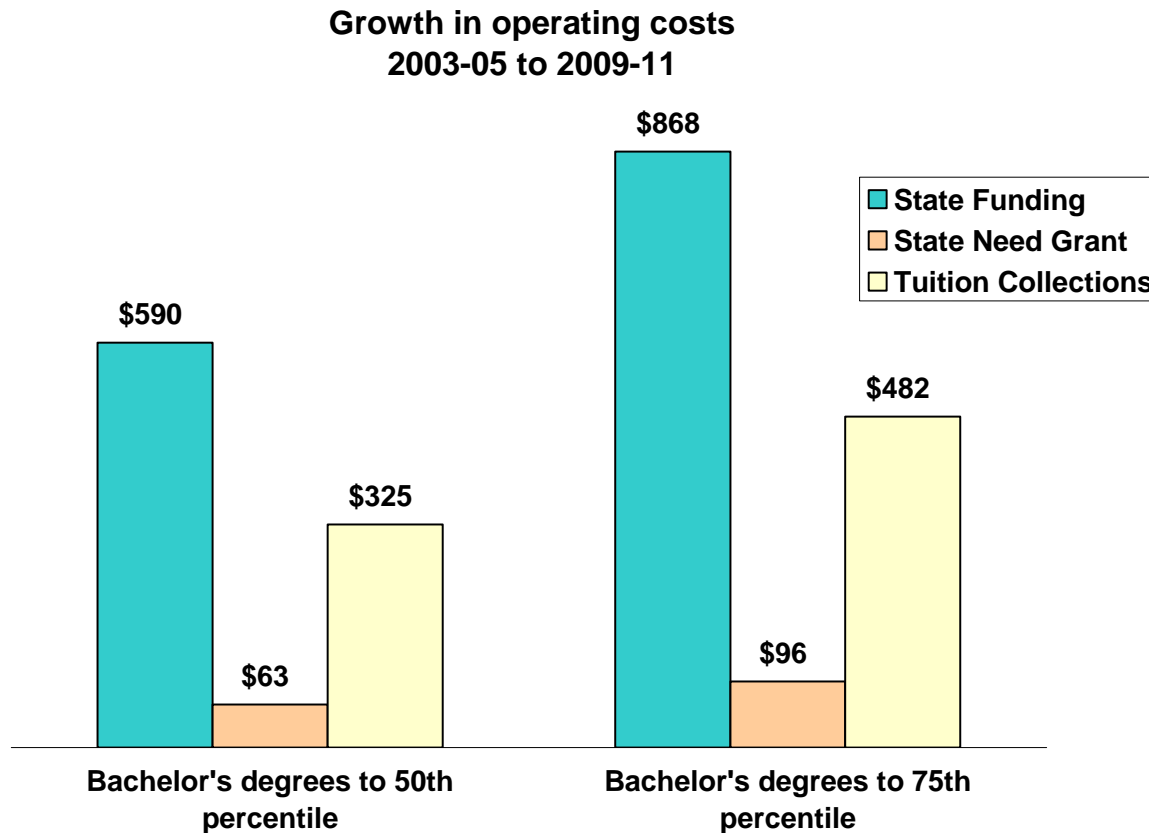


## *Increasing the number of bachelor's degrees requires more funding in the capital budget*

Capital funding needs to increase bachelor's degrees  
(dollars in millions)



## *And more funding in the operating budget*



## ***Next steps***

- **Complete the report to the Legislature**
- **Continue to refine the model**
- **Review more alternatives**
- **Perform regional analysis**
- **Analyze transfer and upper-division needs**

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